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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,107	06/25/2004	Remi Valero	1004900-000263	7911

21839 7590 08/06/2008  
BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER
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HANOR, SERENA L

ART UNIT	PAPER NUMBER
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1793

NOTIFICATION DATE	DELIVERY MODE
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08/06/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/500,107	<b>Applicant(s)</b> VALERO ET AL.	
	<b>Examiner</b> SERENA L. HANOR	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05/09/2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28-47, 49, 50 and 55 is/are pending in the application.
- 4a) Of the above claim(s) 45-47, 49, 50 and 55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

i. Applicant's election with traverse of Group I, Claims 28-44, in the reply filed on 11/09/2007 is acknowledged. The traversal is on the ground(s) that the groups do NOT lack unity of invention. This is not found persuasive because the elected Group I is not novel over the prior art of record (Bomal et al (U.S. Patent No. 5,876,494)).

When initially making this restriction requirement, the Examiner believed the low water-uptake silica with a water-uptake of less than 6% of claim 46 to be the special technical feature and found prior art as evidence that said silica was not novel (Parmentier et al. (U.S. Patent No. 5,009,874)). However, even if the restriction requirement is based upon the process of producing a low water-uptake silica as the special technical feature, said process is not novel over the prior art, as per the rejection set forth in the non-final office action of 01/10/2008, which is set forth again in this final rejection.

The requirement is still deemed proper and is therefore made FINAL.

ii. This application contains claims 45-47, 49, 50 and 55 drawn to an invention nonelected with traverse in the reply filed on 11/09/2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Bomal et al. (U.S. Patent No. 5,876,494).

Bomal et al discloses a process for preparing precipitated silica. An acidifying agent is added to an initial base stock comprising a silicate of alkali metal with a silicate concentration, expressed as SiO<sub>2</sub>, lower than about 20 g/l until said base stock is neutralized (col. 3 lines 1-6, col. 4 lines 4-8, *Applicants' claims 28, 29 and 31*). The acidifying agent may be sulfuric acid, nitric acid, hydrochloric acid, acetic acid, formic acid, or carbonic acid (col. 3 lines 41-44, *Applicants' claim 30*). It may have a normality of 0.4-36N and a concentration of 40-180 g/l (col. 3 lines 45-50, *Applicants' claims 32, 33, 38 and 41*). The silicate may have a concentration of 40-330 g/l (col. 3 lines 55-57, *Applicants' claim 37*). Additional acidifying agent and silicate are then simultaneously added to the reaction mixture while maintaining a pH of 7-9 (col. 3 lines 7-12, col. 5 lines 1-5, *Applicants' claims 34-36*). Example 1 discloses the simultaneous addition of acidifying agent and silicate occurring over 90 minutes (col. 11 lines 6-12, *Applicants' claim 39*). An aluminum compound and a silicate are added, and then additional acidifying agent is finally added such that pH of the mixture is 3-6.5 before the mixture is allowed to undergo a maturation step (col. 5 lines 62-67, col. 6 lines 1-18, *Applicants'*

Art Unit: 1793

*claims 28, 40 and 43*). The same acidifying agent may be used throughout the whole process (col. 6 lines 12-15). The mixture is finally filtered and dried to obtain a cake, and said cake is disintegrated (col. 5 lines 16-21, col. 6 lines 47-63, *Applicants' claims 28 and 44*). The temperature of the reaction is 60-98°C (col. 6 lines 33-34, *Applicants' claim 42*).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- i. Claim 28 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 25 of copending Application No. 10/583,417. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are drawn to a similar process of producing

Art Unit: 1793

precipitated silica involving the mixture of a silicate and an acidifying agent. Both processes utilize a feedstock wherein the silicate concentration, expressed in  $\text{SiO}_2$  equivalents, is less than or equal to 15 g/l, bring the pH of the medium to a value of 7-8 and the silicon concentration in the medium, expressed in  $\text{SiO}_2$  equivalents, to less than or equal to 35 g/l by simultaneously adding a silicate and an acidifying agent, add an acidifying agent to the obtained medium to bring the pH to 3-6.5, and filter and dry the resulting aqueous silica dispersion to obtain a filter cake. The scopes of the inventions overlap and are obvious to each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

ii. Claim 28 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 57 of copending Application No. 11/921,073. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are drawn to a similar process of producing precipitated silica involving the mixture of a silicate and an acidifying agent. Both processes utilize a feedstock wherein the silicate concentration, expressed in  $\text{SiO}_2$  equivalents, is less than or equal to 15 g/l, bring the pH of the medium to a value of 7-8 and the silicon concentration in the medium, expressed in  $\text{SiO}_2$  equivalents, to less than or equal to 35 g/l by simultaneously adding a silicate and an acidifying agent, add an acidifying agent to the obtained medium to bring the pH to 3-6.5, and filter and dry the resulting aqueous silica dispersion to obtain a filter cake. The scopes of the inventions overlap and are obvious to each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicants' arguments filed 05/09/2008 have been fully considered but they are not persuasive.

i. *Applicants argue that Bomal et al's step (ii), which comprises adding an acidifying agent to the base stock until at least 5% of the quantity of M<sub>2</sub>O (alkali silicate) present in the base stock in neutralized, does not correspond to the recited step (b), which requires bringing the pH of the medium to 7-8.*

Bomal et al. states that **at least** 5% of the alkali silicate is neutralized and that preferably 50-99% of the M<sub>2</sub>O present in the initial base stock is neutralized (col. 4 lines 32-41). The use of the term "neutralized" is interpreted as meaning a pH of approximately 7. Example 1 states that during the simultaneous addition step, the instantaneous neutralization ratio of the Na<sub>2</sub>O was 94% and that the pH of the reaction medium was 7.8 for the last 35 minutes of the reaction (col. 11 lines 6-15). It is therefore assumed that there is a relationship between the neutralization ratio and the pH such that a high neutralization ratio implies a neutral pH.

ii. *Applicants also argue that Bomal et al. is completely silent with respect to the requirement of simultaneously adding silicate and an acidifying agent in a manner which maintains the silicon concentration in the medium, expressed as SiO<sub>2</sub> equivalent, to less than or equal to 35 g/l throughout the addition.*

Bomal et al. recites that an acidifying agent and an alkali silicate are simultaneously added to the reaction mixture, as per Applicants' step (c), such that the ratio of the quantity of silicate added (expressed as SiO<sub>2</sub>) to the quantity of silicate present in the initial base stock (expressed as SiO<sub>2</sub>) is greater than 4 and at most 100 (col. 3 lines 7-12). Therefore, if the concentration of the initial base stock is at most 8 g/l (col. 4 lines 4-8), then the quantity of silicate added is 32 g/l, which is less than the 35 g/l recited in step (c).

iii. *Applicants argue that obviousness-type double patenting rejection over Co-pending Application No. 10/583,411 fails to establish a prima facie case of obviousness-type double patenting. It is noted that the differences between the inventions defined by the conflicting claims and the reason why a person of ordinary skill in the art would conclude that the invention defined in the claims at issue would have been an obvious variation of the invention defined in a claim in the patent/application are used in a Graham v. Deere analysis of obviousness-type double patenting.*

With respect to the differences between the inventions defined by the conflicting claims, the conflicting claims both make use of the word "comprising". The conflicting claim 25 of Application No. 10/583,411 comprises each limitation of the instant claim 28. Because the instant claim 28 uses the word "comprising", the claim is open-ended and can therefore be interpreted to allow the inclusion of further limitations. "The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps." See MPEP 2111.03 [R-3] Transitional Phrases. Furthermore, the



instant dependent claim 42 recites a temperature limitation of 90-100°C, which falls within the scope of the conflicting claim 25's temperature limitation of 80-100°C. Finally, any alleged failure to resolve the level of skill in the art is irrelevant, because the conflicting applications share a common inventor and the instant application has an earlier filing date than the conflicting one.

iv. *Applicants argue that obviousness-type double patenting rejection over Co-pending Application No. 11/921,073 fails to establish a prima facie case of obviousness-type double patenting. It is noted that the differences between the inventions defined by the conflicting claims and the reason why a person of ordinary skill in the art would conclude that the invention defined in the claims at issue would have been an obvious variation of the invention defined in a claim in the patent/application are used in a Graham v. Deere analysis of obviousness-type double patenting.*

With respect to the differences between the inventions defined by the conflicting claims, the conflicting claims both make use of the word "comprising". The conflicting claim 57 of Application No. 11/921,073 comprises each limitation of the instant claim 28. Because the instant claim 28 uses the word "comprising", the claim is open-ended and can therefore be interpreted to allow the inclusion of further limitations. "The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps." See MPEP 2111.03 [R-3] Transitional Phrases. Furthermore, the instant dependent claim 42 recites a temperature limitation of 90-100°C, which falls within the scope of the conflicting claim 25's temperature limitation of 80-100°C. Finally,

any alleged failure to resolve the level of skill in the art is irrelevant, because the conflicting applications share a common inventor and the instant application has an earlier filing date than the conflicting one.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SERENA L. HANOR whose telephone number is (571)270-3593. The examiner can normally be reached on Monday - Thursday 8:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone

Art Unit: 1793

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLH

/Timothy C Vanoy/  
Primary Examiner, Art Unit 1793